

Hurricane Preparedness for Solid Waste Management Facilities

Virginia Hurricane Season typically runs from (June 1 through November 30. Hurricanes and associated storms may generate large amounts of debris and other solid wastes. Typically, waste management facilities support cleanup efforts by providing disposal capacity for debris and other solid wastes generated by the hurricane or storm. Demands on solid waste management facilities are highest immediately following the hurricane and through the early phase of recovery. However, emergency coordinators rely on waste management facilities to provide them capabilities and capacities for waste management so a prioritized and coordinated cleanup can begin as quickly as possible. Waste management facilities may find their operations must be augmented with Emergency Waste Management sites during the initial phase of recovery and waste management facility personnel may be expected to operate or oversee both facilities. The information below is intended to assist waste management facilities with preparing for, and assisting with, hurricane/storm cleanups. This is general information and may be supplemented or overridden by local or regional emergency plans and response operations.

Planning

- ☐ Review duties of facility operators and how the facility fits into the local or regional Emergency Response Plan. Review the facility's emergency operating procedures and permit condition, particularly the provisions for managing large amount of debris or special wastes generated during hurricanes or related storms.
- ☐ Determine need for additional solid waste capacity such as storage or burn areas for debris wastes and communicate with local DEQ regional office. Additional storage or burn areas may be accommodated at the permitted landfill or require establishment of a separate area off-site. Emergency permitting requirements are available on the DEQ website at: www.deq.state.va.us/waste/wasteforms.html or from your DEQ regional office. Waste program contacts for each DEQ regional office are available at: <http://www.deq.state.va.us/regions/homepage.html>. In some cases, pre-screening of debris storage or burn sites should be considered prior to an emergency situation. Siting and setback provisions should be observed as indicated in the emergency permit application and end-use of ash should be addressed. Approval of sites via emergency permit may be done verbally but must be followed by written authorization within 5 days. Facilities should contact their DEQ regional office for further information regarding emergency permits.
- ☐ Review waste acceptance plan, approved waste streams, and special waste requirements in permit, operating plan, and VSWMR. Hurricanes and storms may generate contaminated debris or other atypical wastes that require special handling, processing, or disposal procedures that are not addressed by the facility permit and require special approved from DEQ. Review and become familiar with Guidelines for Special Waste Disposal and procedures for obtaining approval from DEQ.
- ☐ Ensure that the facility personnel contact list is accurate and complete. Update as needed.
- ☐ Review personnel training records. Some personnel with special skills may not be available for facility operation due to reassignment as emergency responders (e.g., volunteer fire or rescue personnel, County emergency responders, etc.).
- ☐ Ensure vendor contact list is complete and accurate. Review specific services or supplies/materials provided by Vendors and verify availability with vendor in case of local emergency. Some vendors may not be available to provide normal services or provide supplies/materials in the event of a local emergency due to competing priorities faced in emergency operations or as a result of damage caused by the hurricane or associated storm. Facility should consider acquiring supplies and materials prior to an anticipated hurricane or storm ensure adequate availability and supply. Examples of emergency equipment may include fuel, stone, additional soil cover or alternate material, vehicles, heavy equipment, grinder/chippers, auxiliary lighting, pumps, generators, fire suppressant equipment, foul weather gear, personnel protective equipment, etc.
- ☐ Review procedures for facility or area evacuation, power failure, or loss of communications and update as appropriate. Facility shutdown and security provisions should be reviewed with staff. Alternate communications and pre-arranged emergency operations schedule should be prepared and reviewed with staff prior to a hurricane or storm event.

Communications

- ☐ Provide staff with public service information and reminders on what to do to in case emergency operations are needed. This may include how they should protect personal property and insure safety of family members in the event they must staff the facility in response to an emergency.
- ☐ Verify through local emergency coordinator the potential effects of the storm (i.e., severe flooding, storm surge, high winds, etc.) and early predictions of when the facility will need to be fully staffed and operating.
- ☐ Establish criteria and procedures for facility communications with emergency coordinators and general public in event of emergency operations. Address how to notify emergency coordinators of 1) when the facility becomes operational after the storm, 2) facility situation (e.g., waste storage capacity, transportation coordination, etc.), and 3) alternate waste disposal outlets available locally such as scrap metal recyclers, unacceptable wastes, and need for source separation of wastes (as practicable).

Consider how to communicate with general public to address their waste disposal needs (e.g., destroyed automobiles, animal carcasses, debris waste sites operating under emergency permits, disposal of contaminated media, other special waste requirements, etc.).

- ❑ Conduct staff briefing for review of facility emergency operating, logistical, and administrative procedures in event of emergency operations. Review and establish means of primary communication and plan for backup communication between staff members in event of emergency. Discuss alternate work schedules, staffing needs, over-time tracking, overnight accommodations, etc.
- ❑ Establish contact with local emergency coordinator for verification of the facility's readiness status.
- ❑ Maintain contact with local emergency coordinator for updates and briefings. Confirm with local emergency coordinator that the facility contact list has accurate and complete list of names and phone numbers for specific facility contact personnel.
- ❑ Confirm status of State of Emergency declarations and pre-deployment of federal, state, and local assets to support emergency response and cleanup operations.
- ❑ Advise staff to establish and carry out family plans for possible evacuation or sheltering in place. Offer support to staff members with critical situations or vulnerable family members (e.g., elder, special care individuals, etc.).

Facility Operations

- ❑ Ensure facility is prepared for extreme weather conditions. Ditches, sediment traps, and sediments ponds should be cleaned to ensure adequate capacity as designed (24hour/25year storm). Riprap may be needed to stabilize or supplement run-on/runoff systems. All roads should be maintained and upgraded with stone, etc. for operation in all weather conditions. Additional cover material (in addition to the normal three-day supply) should be stockpiled to ensure adequate supply for extended or accelerated operations and to repair damaged cover systems. Holding capacity of leachate tanks and/or ponds should be increased to ensure addition volumes added during storm events can be accommodated.
- ❑ Verify that primary and secondary communications equipment within the facility is in good working order.
- ❑ Confirm equipment and materials/supplies needed for emergency operations have been acquired or are available. Ensure sufficient fuel and equipment (vehicles, grinders, chippers, fire suppressant equipment, lighting, etc.) is available on-site. Ensure equipment is in good working order. Maintain provisions for backup equipment as needed. This may include heavy equipment, vehicles, grinders/chippers, portable lights, generators, communications equipment, computers, flashlights, etc. Ensure an adequate number of properly trained employees are available or on-call to accommodate increased waste disposal operations and public inquiries.
- ❑ Conduct briefing to entire staff on status of conditions and assessment of hurricane or storm severity and how it may impact the facility and service area or region. Discuss emergency operating procedures for facility. If there is potential for massive power failures and reduction of normal communications systems, review procedures for how the staff will communicate with emergency response coordinators and vendors. Power outages should be anticipated and procedures employed as needed to track the date waste was received, the quantity by weight or volume, and the origin of the waste.
- ❑ Pre-identify staff members who will be placed on stand-by and those individuals needed to meet needs for facility operation and coordination with event cleanup. Additional staff and equipment may be needed to operate emergency permit sites.
- ❑ Implement facility plan to secure facility property, structures, equipment, and office. Ensure that operating equipment, materials/supplies, and vehicles not needed for emergency operations are properly secured in the event of high winds, flooding or power failure. Implement facility office plan for securing fixed structures, preservation of records and data management (both paper and electronic).